

MISCELLANEOUS NEW SPECIES
IN THE PLEUROTHALLIDINAE (ORCHIDACEAE)

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Dracula syndactyla Luer, sp. nov.

Inter species *Draculae* Luer habitu mediocri, floribus parvis, pedunculo plus minusve horizontali, sepalis late ovatis ferrugineo suffusis in cupulam non profundam connatis intus hirsutis, petalis perparvis bivalvatis verruculosiss, labello albo roseo suffuso, hypochilio epichilio subaequimagno, epichilio concavo costato margine denticulato distinguitur.

Plant medium in size, epiphytic, caespitose; roots slender, flexuous. Secondary stems erect, channeled, unifoliate, 2-4 cm long, enclosed by 1-2 loose, tubular sheaths. Leaf erect, thinly coriaceous, elliptical, subpetiolate, lightly plicate, carinate dorsally along the midrib, 12-17 cm long, 2-3.2 cm wide, the apex acute, tridenticulate, narrowed below to the base. Inflorescence a successively few-flowered raceme borne by a more or less horizontal peduncle 8-12 cm long, from a node low on the secondary stem; floral bract 6-7 mm long; pedicel 7-8 mm long; ovary purple-brown, 4 mm long; sepals broadly ovate, dull white, suffused and marked with red-brown, hirsute within, the obtuse apices contracted into slender, purple-brown tails 2.5-4.5 cm long, the dorsal sepal 10 mm long, 12-15 mm wide, connate 5 mm to the lateral sepals to form a shallow sepaline cup, the lateral sepals connate 10 mm into a lamina 13 mm long, 22 mm wide, with a broad, shallow mentum; petals ivory, marked with brown, oblong, 3 mm long, 2 mm wide, the rounded apex bivalvate, verruculose between the lamina; lip white, suffused with rose, pandurate, 7 mm long, 5 mm wide, the hypochile 4 mm long, 4 mm wide, with erect, obtuse, marginal angles, deeply cleft centrally between a pair of antrorse teeth, the concave base hinged to the column-foot, the epichile thick basally, thin marginally, suborbicular, more or less deflexed on the hypochile, 4 mm long, 5 mm wide, concave, filled with ca. 9 smooth, radiating ribs which protrude from the subdigitate, non-involute margin; column yellow-white, semiterete, 4 mm long, with a thick foot equally long.

ETYMOLOGY : From the Greek *syndactylos* (συνδακτυλος), "webbed fingers," in allusion to the appearance of the epichile.

TYPE: COLOMBIA: NARIÑO: epiphytic in cloud forest above La Planada, alt. 1950 m, above Ricuarte, 2 Nov. 1979, C. & J. Luer, A. Hirtz et al., cultivated by A. Hirtz in Quito, Ecuador, flowered in cult. 18 May 1981, C. Luer 6313 (HOLOTYPE : SEL).

DISTRIBUTION : Southern Colombia.

This small-flowered species grows with the large-flowered *D. radiosa* (Rchb. f.) Luer and several intermediate forms (presumed hybrids) have flowered in cultivation. *Dracula syndactyla* may be recognized by the small size; ovate, obtuse, hirsute sepals; and a lip with the hypochile and epichile of nearly equal size, the epichile with radiating ribs that protrude from the non-involute margin creating the effect of webbed fingers.

Dracula × *radio-syndactyla* Luer, hybr. nov.

Planta inter *D. radiosa* (Rchb. f.) Luer et *D. syndactyla* Luer intermedia et verisimiliter ex hybridatione harum specierum orta: flores mediocres intus

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pubescentes epichilio labelli concavo costis radiantibus, margine epichilio plus minusve digitato.

Plant intermediate between *D. radiosa* and *D. syndactyla*. Secondary stems 3-5 cm long. Leaf thinly coriaceous, plicate, elliptical, subacute, subpetiolate, 12-20 cm long, 2.3-4.3 cm wide. Inflorescence a successively few-flowered raceme borne by a more or less horizontal peduncle. Sepals broadly ovate, dull white, suffused and marked with brown, pubescent within, the obtuse apices contracted into slender, purple-brown tails 4-5 cm long; petals oblong, 3 mm long, 2 mm wide, the rounded apex bivalvate; lip 7-9 mm long, 5-8 mm wide, the epichile suborbicular, concave, 5-7 mm long, 5-8 mm wide, filled with ca. 9 smooth, radiating ribs which reach the entire or subentire margin, involute or non-involute.

ETYMOLOGY : Named for the putative parents.

TYPE : COLOMBIA : NARIÑO : epiphytic in cloud forest above La Planada, 1950 m, above Ricuarte, 2 Nov. 1979, C. & J. Luer, A. Hirtz et al., cultivated by A. Hirtz in Quito, Ecuador, flowered in cult., *C. Luer 6314* (HOLOTYPE : SEL).

DISTRIBUTION : Southern Colombia.

Several plants collected at the same time and place as *D. radiosa* and *D. syndactyla* have produced flowers intermediate between the two. The large, pendent-flowered *D. radiosa* has a deep mentum; the sepals are essentially glabrous within (only microscopically are cell-hairs visible); and the large, concave epichile has radiating ribs ending at a smooth, involute margin. *Dracula syndactyla* bears the small flowers horizontally; the mentum is very shallow; the sepals are hirsute within; and the epichile (about the same size as the hypochile) is concave with the radiating ribs protruding from the non-involute margin.

The putative, natural hybrids bear the intermediate-sized flowers more or less horizontally; the mentum is shallow; the sepals are pubescent within; and the lip is variable, features of either presumed parent appearing in different clones. Both parents and the hybrid exhibit a thickened band in the lateral sepals extending laterally from the column-foot.

Masdevallia andreettaeana Luer, sp. nov.

Planta mediocris caespitosa, pedunculo unifloro foliis ellipticis longipetiolatis brevior, sepalis niveis in cupulam latam brevem connatis, sepalo dorsali anteflexo obovato obtuso cum cauda gracili acute reflexa, synsepalo latissime expanso plano caudis deflexis; petalis oblongis supra basim unidentatis, labello parvo purpureo sigmoideo clavellato.

Plant medium in size, epiphytic, caespitose; roots slender, flexuous. Secondary stems blackish, slender, unifoliate, 1-2 cm long, enclosed by 2 loose, tubular sheaths. Leaf erect, coriaceous, elliptical, long-petiolate, 6-8.5 cm long including the 2-3.5 cm long, blackish petiole, 1.6-2.2 cm wide, the apex obtuse, tridentulate, the base cuneate into the petiole. Inflorescence a solitary flower borne by an erect to ascending, slender peduncle 3-3.5 cm long, from a node low on the secondary stem; floral bract 6-8 mm long; pedicel 7 mm long; ovary deep purple, 4-5 mm long; sepals snow white, glabrous, the dorsal sepal microscopically papillose within above the middle, the blade anteflexed, 13 mm long, 11 mm wide, connate to the lateral sepals for 4 mm

to form a shallow cup, the rounded apex reflexed, abruptly contracted into an acutely reflexed, slender, white tail 4.5 cm long, the lateral sepals connate 12 mm into a broadly expanded, transversely obovate, flat lamina 15 mm long, 24 mm wide, the broadly obtuse apices abruptly contracted into slender, descending, white tails 3.5 cm long; petals white, more or less oblong, 4.75 mm long, 1.25 mm wide, the apex subtruncate, with a low, longitudinal callus along the lower margin ending in a deflexed, cylindrical, 0.75 mm long process a short distance above the base; lip white, suffused with purple above the middle, more or less oblong-subpandurate, sigmoid from the lateral view, 4.5 mm long, 1.5 mm wide, the margins revolute with obtuse, minutely serrulate angles near the middle beneath, narrowed above the middle, geniculate, "U-shaped" from the lateral view, the apex clavate with the tip acutely revolute, the base thickened, cordate, flexibly hinged by a thin strap below, 1 mm from the basal margin; column white, semiterete, 4.5 mm long, with a thick foot 2 mm long.

ETYMOLOGY : Named in honor of Padre Angel Andreetta of Cuenca, Ecuador, at the request of Mario Portilla, discoverer of this species.

TYPE : *ECUADOR*: MORONA-SANTIAGO : epiphytic near Bomboiza, Río Chumpias, alt. 1600-1800 m, Oct. 1980, M. Portilla, cultivated in Cuenca, flowered in cult. 5 May 1980, *A. Andreetta 1777* (HOLOTYPE: SEL), C. Luer illustr. 6316.

DISTRIBUTION : Southern Ecuador.

This species of the "swivel-lip" group (i.e., those species related to *M. wagneriana* Linden ex Lindl.) is notable in the comparatively large leaves, snow-white flowers with a broadly expanded flat synsepal, petals with a single, narrow tooth, and a lip without wings.

Masdevallia calocodon Luer & Vásquez, sp. nov.

Planta mediocris caespitosa, pedunculo unifloro foliis ellipticis longipetiolatis brevioribus vel subaequilongis, flore specioso grandi campanulato purpureo vittato intus breviter pubescenti, apicibus sepalorum abrupte caudatis, petalis supra basim unidentatis et labello grandi oblongo arcuato trilineato apice unilobulato.

Plant medium in size, epiphytic, caespitose; roots coarse, flexuous. Secondary stems 1.5-4.5 cm long, often blackish, unifoliate, enclosed by 2-3 loose, tubular sheaths. Leaf erect, coriaceous, elliptical, long-petiolate, 7-12 cm long including the 2-6 cm long petiole, 2-2.5 cm wide, the apex tridenticulate, subacute to obtuse or rounded, the base cuneate into the petiole. Inflorescence a solitary, showy flower borne by an erect, terete peduncle 4-9 cm long, with a bract below the middle, from a node low on the secondary stem; floral bract tubular, 9-12 mm long; pedicel 1-3 cm long; ovary 5-6 mm long; sepals white to rose with conspicuous red-purple stripes along the veins, with a short, red pubescence within, the dorsal sepal obovate, 20-22 mm long, 15-17 mm wide, 3-veined, connate to the lateral sepals for 16-17 mm to form a gaping, bell-shaped sepaline tube, the free portion broadly triangular, the obtuse apex contracted into an erect, terete, green tail 16-28 mm long, the lateral sepals broadly obovate, oblique, connate 9-15 mm to form a transverse lamina more or less with a transverse fold to form a mentum with the column-foot, each 20-22 mm long, 18-22 mm wide, 3-veined, the rounded apices contracted into tails 12-23 mm long, similar to that of the dorsal

sepal; petals white, oblong, 6.5-8 mm long, 2-3 mm wide, the obtuse apex unevenly bilobulate, the labellar margin with a thick keel terminating in a retrorse tooth above the base; lip dull white, heavily suffused with purple and with 3 longitudinal stripes, oblong, subpandurate, arcuate, 10-11 mm long, 5-6 mm wide, the obtuse apex with a central lobule, the disc with a pair of longitudinal purple carinae and with a purple stripe in the central sulcus between them, the base cordate-truncate, hinged to the column-foot; column white, marked with red, semiterete, 6 mm long, the foot equally long, with a short, incurved extension.

ETYMOLOGY: From the Greek *kalos* (καλός), "beautiful," and *codon* (κωδών), "a bell," referring to the showy, bell-shaped flower.

TYPE: *BOLIVIA*: SANTA CRUZ: epiphytic and terrestrial in moss in cloud forest near Sibiria, alt. 2500 m, 2 Dec. 1978, C. Luer, J. Luer, L. Kuhn, J. Kuhn et al. 3592 (HOLOTYPE: SEL); same area, March 1975, J. Kuhn et al. s.n., flowered in cult. at J & L Orchids, Easton, Ct., 21 Apr. 1978, C. Luer 2921 (SEL) and flowered in cult. at La Ceja, Colombia, by M. & O. Robledo, 21 July 1978, C. Luer 2939 (SEL); and 10 Oct. 1977, C. Luer 1970 (SEL); COCHABAMBA: epiphytic in cloud forest between Cochabamba and Villa Tunari, alt. 2600 m, 26 Nov. 1978, C. Luer, J. Luer, L. Kuhn, J. Kuhn et al. 3501, 3508 (SEL).

DISTRIBUTION: Bolivia.

This showy species has been in cultivation for the past several years under the name of *M. paivaeana* Rchb. f. After having recently found the real *M. paivaeana* at the type locality, it is now obvious that the two are not the same. The large, bell-shaped flower of *M. calocodon* is usually pale rose and conspicuously striped in red-purple.

Masdevallia citrinella Luer & Malo, sp. nov.

Planta parva caespitosa flore solitario, pedunculo gracili foliis ellipticis longipetiolatis plus minusve aequilongo, sepalis citrinis brunneo puncticulatis abrupte longicaudatis, dorsali parvo deflexo, lateralibus in synsepalum late applanatum connatis, petalis margine inferiore bidentato, labello mobili columna breviori basi inflato suborbiculato, marginibus revolutis erosis, apice clavato.

Plant small, epiphytic, caespitose; roots slender, flexuous. Secondary stems slender, unifoliate, 1-1.5 cm long, concealed by 2 thin, white sheaths. Leaf erect, coriaceous, elliptical, long-petiolate, 2.5-3.5 cm long including the 1.2-1.8 cm long petiole, 1-1.1 cm wide, cuneate below into the petiolate base. Inflorescence a solitary flower borne by a slender, ascending to more or less horizontal peduncle 3-5 cm long, from a node low on the secondary stem; floral bract thin, tubular, 9 mm long, enclosing the 5 mm long pedicel; ovary green, 4 mm long; sepals lemon yellow, diffusely covered within by numerous, minute, irregularly raised patches of brown cells appearing as tiny spots, the tails green; dorsal sepal anteflexed, carinate, ovate, 8 mm long, 7 mm wide, connate to the lateral sepals for 3 mm, the rounded apex contracted into a slender, acutely reflexed tail 33-45 mm long; lateral sepals connate 13 mm to form a broadly expanded, transversely obovate lamina 17 mm long, 33 mm wide, the transverse apices abruptly contracted into descending tails 25-35 mm long; petals yellow-white, thick. more or less oblong, 2.5 mm long, 1-1.75 mm wide, the apex obtuse, the lower margin with a longitudinal

callus produced into a narrowly triangular wing near the middle and a slender retrorse tooth at the base; lip white, marked with purple, more or less oblong, 3.5 mm long, 1.25-1.5 mm wide, the sides revolute forming a bulbous dilatation at the base, connected from within to the column-foot by a thin, flexible strap, above the bulbous base the margins thin, everted, obtusely angled, minutely erose, then narrowed to the clavate apex formed by the revolute tip; column greenish white, dotted with purple, curved, longitudinally winged, 4 mm long, the foot short, broad, thick.

ETYMOLOGY : From the Latin *citrinellus*, "diminutive of 'lemon yellow'," referring to the color of the sepals.

TYPE: *ECUADOR*: ZAMORA-CHINCHIPE : epiphytic in cloud forest between Loja and Zamora, alt. 1900 m, B. Malo s.n., cultivated near Tarquí, flowered in cult. 4 May 1981, C. Luer 6092 (HOLOTYPE: SEL).

DISTRIBUTION : Southeastern Ecuador.

This little species may be recognized by the lemon yellow flowers dotted with brown. The synsepal is broadly expanded below the small, deflexed dorsal sepal with an acutely reflexed tail. Each petal is distinctly bidentate on the lower margin. The minute, bulbous-based lip is loosely attached like a swivel to the column-foot.

Masdevallia excelsior Luer & Andreetta, sp. nov.

Planta mediocris, racemo trifloro floribus distantibus longipedicellatis successivis, pedunculo triquetro foliis longipetiolatis multilongiore, sepalo dorsali aurantiaco cauda gracili longissima erecta, synsepalo atropurpureo verruculoso expanso apicibus obtusis longicaudatis, petalis oblongis callosis, labello punctulato pandurato apice breviter acuminato verruculoso.

Plant medium in size for the *Alaticaulis* section, epiphytic, caespitose; roots coarse, flexuous. Secondary stems unifoliate, 3-4 cm long, enclosed by 2-3 loose, tubular sheaths. Leaf erect, coriaceous, elliptical, long-petiolate, 10-15 cm long including the 4-6 cm long petiole, 2-2.7 cm wide, the apex subacute, tridenticulate, narrowly cuneate below into the petiole. Inflorescence a successively, distantly 3-flowered (always?) raceme up to 6 cm long, 2-3 cm between flowers, borne by an erect, triquetrous peduncle 20-24 cm long, with a basal bract, from a node low on the secondary stem; floral bract tubular, oblique, 15-20 mm long; pedicel 28-30 mm long; ovary green, 4 mm long; dorsal sepal yellow-orange, subverrucose within, the blade ovate, 9 mm long, 7 mm wide, connate to the lateral sepals for 3 mm to form a short cup, the acute apex contracted into a slender, erect tail 4.5 cm long; lateral sepals dark purple, verrucose within, more or less elliptical, connate 16 mm into an expanded lamina 20 mm long, 18 mm wide, with a white, concave mentum below the lip, the obtuse apices contracted into yellow-orange tails 3 cm long; petals white, oblong, 4.5 mm long, 1-1.5 mm wide, the apex obtuse, minutely notched, with a longitudinal lamella along the lower margin ending in a thick, broadly angled callus above the base; lip cream, intensely spotted with purple, subpandurate, 5 mm long, 1.75 mm wide, with broadly obtuse, marginal angles near the middle, narrowed above the middle, then dilated before the shortly acuminate, minutely verrucose apex, the truncate base hinged to the column-foot; column greenish white with a purple line along the margin, semiterete, 5 mm long, the short, thick foot with a short, incurved extension.

ETYMOLOGY : From the Latin *excelsior*, "higher," in allusion to the peduncle, longer than that of many close relatives.

TYPE: *ECUADOR*: MORONA-SANTIAGO: epiphytic in cloud forest, Valle de Río Negro, afluyente de Paute, Lomipuerco, alt. 2000 m, A. Andreetta & M. Portilla, cultivated in Cuenca, flowered in cult. 5 May 1981, C. Luer 6100 (HOLOTYPE : SEL).

DISTRIBUTION : Southeastern Ecuador.

This species is characterized by the tall, triquetrous peduncle bearing a few-flowered raceme (each three-flowered in the few specimens seen) of successive distantly spaced flowers which reach anthesis about two weeks apart. Occasionally the older flower is still present when the next flower opens. The long-tailed flowers are most similar in appearance to those of *M. odontopetala* Luer, but the lack of the long tooth of the petal and the pandurate lip separate them.

Masdevallia midas Luer, sp. nov.

Planta mediocris flore solitario pallido viridi aurescenti, pedunculo erecto foliis crassis atrovirentibus petiolis nigro suffusis brevior, sepalis carnosius anguste ovatis in tubum infra medium connatis crassicaudatis, petalis oblongis truncatis unguiculatis, labello ligulato obtuso bicalloso.

Plant small to medium in size, epiphytic, caespitose; roots slender, flexuous. Secondary stems black, unifoliate, stout, 1-2.5 cm long, enclosed by 1-2 loose, blackish, tubular sheaths. Leaf thickly coriaceous, dark green, speckled and mottled with black beneath, elliptical, petiolate, 2.5-9 cm long including the 0.5-3.5 cm long black petiole, 1-1.8 cm wide, the apex acute, tridenticulate, the base cuneate into the petiole. Inflorescence a solitary flower borne by an erect, blackish peduncle 1.5-4 cm long; floral bract 4-7 mm long, enclosing the 1.5-2 mm long pedicel and part of the 2.5-4 mm long ovary. sepals fleshy, light green turning to yellow then orange with age, dotted with black, the dorsal sepal narrowly ovate, 23 mm long, 3.5 mm wide, connate to the lateral sepals for 10 mm to form a cylindrical tube, the free portions thickened, narrowly triangular, obtuse, the lateral sepals each 22 mm long, 4 mm wide, connate 9 mm, the free portions subfalcate, similar to that of the dorsal sepal; petals white, broadly oblong, 4.5 mm long, 2 mm wide, the apex truncate, minutely apiculate, thickened along the lower margin and ending in an obtuse angle above the shortly unguiculate base; lip yellow-green, oblong-ligulate, 7 mm long, 3 mm wide, slightly dilated above the middle to the thickened, obtuse, orange apex, the thickened base dark yellow, cordate, hinged beneath, the disc with a pair of low, longitudinal calli; column greenish-white, semiterete, 5 mm long, the foot short with an incurved extension.

ETYMOLOGY: Named for the mythological Greek king Midas whose touch turned everything into gold.

TYPE: *ECUADOR*: ZAMORA-CHINCHIPE: epiphytic in cloud forest south of the pass, alt. 2730 m, south of Yangana, 12 May 1981, C. Luer, J. Luer, J. Kuhn, L. Kuhn & D. D'Alessandro 6208 (HOLOTYPE : SEL).

DISTRIBUTION : Southern Ecuador.

This fleshy-flowered species is similar to the membranous-flowered *M. tubulosa* Lindl., but the former is easily recognized by the thick, rigid tails and short, truncate petals.

Masdevallia oreas Luer & Vásquez, sp. nov.

Planta parva caespitosa caulibus secundariis brevibus, foliis anguste ellipticis subacutis brevipetiolatis pedunculo tereti 1- vel 2-floro plusminusve aequilongis, tubo sepalorum aureo longicaudato, sepalis lateralibus purpureo suffusis, petalis parvis angustis breviter acuminatis et labello parvo punctulato pandurato apiculato.

Plant small, epiphytic, caespitose, floriferous; roots slender, flexuous. Secondary stems abbreviated, 1-1.5 cm long, unifoliate, enclosed by 2 thin, tubular sheaths. Leaf erect, coriaceous, elliptical, shortly petiolate, 6-8.5 cm long including the 1-1.5 cm long petiole, 11-14 mm wide, the apex tridenticulate, subacute, the base narrowly cuneate into the petiole. Inflorescence usually a closely 2-flowered raceme, occasionally single-flowered, the flowers appearing successively, occasionally simultaneously, borne by a suberect, slender, terete peduncle 6-9.5 cm long, with a basal bract, from a node low on the secondary stem; floral bract thin, tubular, 6-8 mm long; pedicel 7-12 mm long; ovary 3 mm long; dorsal sepal orange, oblong, 7 mm long, 4 mm wide, connate to the lateral sepals for 6 mm to form a sepaline tube, the free portion short, broadly triangular, the obtuse apex contracted into an erect, terete, orange tail 2-3 cm long; lateral sepals basically orange, diffusely suffused with dark purple within, glabrous, obovate, oblique, 15 mm long, 5 mm wide, connate 6 mm to form a shallow ventricosity, the subacute apices contracted into recurved tails similar to that of the dorsal sepal; petals creamy white, linear-oblong, 5 mm long, 1-1.5 mm wide, the apex shortly acuminate, acute, the labellar margin with a low, thin keel terminating in a low, rounded callus at the base; lip cream, diffusely dotted with dark purple, oblong-pandurate, with marginal folds above the middle and recurved sides, 4.5 mm long, 1.5 mm wide, the apex minutely verrucose, subtruncate, recurved, abruptly apiculate, the base cordate-truncate, hinged to the column-foot; column purple, semiterete, 4 mm long, the foot 3 mm long, with a short, incurved extension.

ETYMOLOGY: Named for the mythological mountain-nymph Oreas.

TYPE: BOLIVIA: LA PAZ: Prov. of Inquisivi, epiphytic in cloud forest between Inquisivi and Circuata, alt. 2200 m, 29 Jan. 1981, C. Luer, J. Luer, E. Besse & R. Vásquez 5778 (HOLOTYPE: SEL).

DISTRIBUTION: Bolivia.

This small, floriferous species, characterized by a two-flowered inflorescence borne by a terete peduncle, seems to be related to the larger *M. menatoi* Luer & Vásquez. The tails of the orange-flowered *M. oreas* are much longer.

Masdevallia zygia Luer & Malo, sp. nov.

Planta grandis, racemo geminifloro, pedunculo erecto foliis ellipticis longipetiolatis subaequilongo, floribus magnis longicaudatis brevipedicellatis, ovario tricristato, bracteis floralibus inflatis cucullatis, petalis apiculatis serrulatis, labello ligulato verruculoso subplicato.

Plant large, epiphytic, caespitose; roots slender, flexuous. Secondary stems stout, unifoliate, 2.5-3.5 cm long, enclosed by 2-3 loose, imbricating, tubular sheaths. Leaf erect, coriaceous, elliptical, subplicate, long-petiolate, 12-20 cm long including the 6-8 cm long petiole, 3-4 cm wide, the apex subacute, tridenticulate, cuneate below into the petiolate base. Inflorescence a

simultaneously 2-flowered raceme, 3 cm between the flowers, often with an aborted third flower above, borne by an erect, terete peduncle 18-24 cm long, with a bract below the middle and another at the base, from a node low on the secondary stem; floral bract inflated, 1.5 cm long, 1 cm wide, enclosing the pedicel and ovary; pedicel thick, 4-5 mm long; ovary 3-crested, 5 mm long; sepals yellow, suffused and spotted with purple, lightly verrucose and pubescent within, the tails slender, yellow, 3.5 cm long, the dorsal sepal ovate, concave, 17 mm long, 13 mm wide, connate to the lateral sepals for 7 mm to form a cup, the obtuse apex abruptly contracted into the tail, the lateral sepals ovate, 20 mm long, 8 mm wide, connate 8 mm, the subacute apices contracted into the tails; petals white with purple spots, oblong, 6.5 mm long, 2.3 mm wide, the apex sub-tridentate, apiculate, the upper margin minutely serrulate above the middle, the lower margin with a longitudinal callus ending in a rounded curve a short distance above the unguiculate base; lip verruculose, diffusely spotted with purple on cream, oblong-ligulate, 5.5 mm long, 2.5 mm wide, the apex rounded, slightly narrowed above the middle, the subcordate base hinged beneath, the disc with a pair of low, ill-defined calli; column white, marked with purple, semiterete, 5.5 mm long, with a short, thick foot.

ETYMOLOGY : From the Greek *zygios* (ζυγιος), "yoked, or paired," referring to the two-flowered inflorescence.

TYPE : *ECUADOR*: ZAMORA-CHINCHIPE: epiphytic between Loja and Zamora, alt. 2500 m, collected ca. 1975 with *M. rosea* Lindl. by B. Malo, cultivated near Tarqui, flowered in cult. 8 May 1981, *C. Luer* 6093 (HOLOTYPE: SEL).

DISTRIBUTION : Southern Ecuador.

This is the largest flowered species known to date in the "polysticta-group" and the first species in the group to be discovered in the rich Loja-Zamora region. It was collected by Benigno Malo about 1975 and it has been cultivated by him since that time without flowering. Suddenly in 1981 it produced several, long, erect, simultaneously two-flowered inflorescences.